

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Previously Presented) A ground connection structure comprising:

a substrate, on whose surface a ground is formed;

a ground connecting member which is connected to said ground; and

a compensating member which compensates for an area of said ground and is joined to said substrate such that said ground connecting member is sandwiched between said compensating member and said substrate, wherein said ground connecting member:

extends from said substrate toward said compensating member;

directly resiliently contacts said compensating member; and

electrically connects said ground with said compensating member in a low impedance state.

2. (Previously Presented) The ground connection structure according to claim 1, wherein said ground connecting member comprises:

a base which is connected to said ground; and

a spacer which is arranged on said base and has elasticity.

3. (Previously Presented) The ground connection structure according to claim 2, wherein:

said substrate has at least one through-hole for fixing said ground connecting member on said substrate; and

said base includes at least one lead, which is inserted into the at least one through-hole and connected to said ground.

4. (Previously Presented) The ground connection structure according to claim 3, wherein said at least one lead has elasticity and a protruding portion for fixing said ground connecting member onto said substrate.

5. (Previously Presented) The ground connection structure according to claim 2, wherein said base has at least one lead having a margin, left for being connected to said ground and formed in parallel with surface of said ground.

6. (Previously Presented) The ground connection structure according to claim 2, wherein said spacer includes a plate spring.

7. (Previously Presented) The ground connection structure according to claim 2, wherein said spacer includes a coil spring.

8. (Previously Presented) A ground connecting member, which is arranged between a substrate and a compensating member which compensates for an area of a ground formed on said

substrate, and which electrically connects said ground and said compensating member, and said ground connecting member comprising:

a base which is connected to said ground; and

a spacer which is arranged on said base and has elasticity, wherein:

said spacer is in direct physical contact with said compensating member; and

said ground connecting member is sandwiched between said substrate and said compensating member, and electrically connects said ground and said compensating member in a low impedance state.

9. (Previously Presented) The ground connecting member according to claim 8, wherein:
said substrate has at least one through-hole for fixing said ground connecting member onto said substrate;

said base has at least one lead to be inserted into the at least one through-hole; and

said at least one lead has elasticity and a protruding portion for fixing said ground connecting member onto said substrate.

10. (Previously Presented) The ground connecting member according to claim 8, wherein
said base has at least one lead having a margin, left for being connected to said ground and being in parallel with surface of said ground.

11. (Previously Presented) The ground connecting member according to claim 8, wherein

said spacer includes a plate spring.

12. (Previously Presented) The ground connecting member according to claim 8, wherein said spacer includes a coil spring.

13. (Previously Presented) A ground connection method comprising:
connecting a ground connecting member having elasticity and conductivity, to a ground formed on a substrate; and
arranging a compensating member for compensating for an area of said ground, on said substrate, wherein said ground connecting member:
extends from said substrate toward said compensating member;
to directly resiliently contacts said compensating member; and
is sandwiched between the compensating member and said substrate, thereby electrically connecting said ground and said compensating member via said ground connecting member in a low impedance state.

14. (Previously Presented) The ground connection structure according to claim 2, wherein said compensating member is contacted directly by said spacer.

15. (Previously Presented) The ground connection structure according to claim 1, wherein

said ground connecting member comprises a base section and a spacer;
a plurality of leads project from said base section toward said substrate, and are electrically connected to said ground; and
said spacer is arranged between, and electrically connects, said base section and said compensating member, and has elasticity.

16. (Previously Presented) The ground connection structure according to claim 15, wherein:

said base section comprises a generally planar portion extending generally in parallel to said substrate; and
said plurality of leads project orthogonally from said generally planar portion.

17. (Previously Presented) The ground connection structure according to claim 15, wherein:

said substrate further comprises through holes;
said ground is arranged on a side of said substrate opposite to said compensating member; and
said plurality of leads pass through said through holes to be electrically connected to said ground.

18. (Previously Presented) The ground connection structure according to claim 17,
wherein:

a distal end of at least one of said plurality of leads comprises a protruding section
integral to said at least one of said plurality of leads;

when said plurality of leads pass through said through holes, said protruding section is
arranged on a side of said substrate opposite to said base section, and mechanically fixes said
substrate between said protruding section and said base section, so that no solder is required to
connect said at least one of said plurality of leads to said ground.

19. (Previously Presented) The ground connection structure according to claim 15,
wherein:

said ground is arranged on a side of said internal substrate adjacent to said compensating
member; and

at least one of said plurality of leads comprises a tip part that extends generally
orthogonally from said at least one of said plurality of leads to provide said electrical connection
between said at least one of said plurality of leads and said ground.

20. (Previously Presented) A ground connection structure comprising:

a substrate, on whose surface a ground is formed;

a ground connecting member which is connected to said ground; and

a compensating member which compensates for an area of said ground and is joined to said substrate such that said ground connecting member is sandwiched between said compensating member and said substrate, and wherein said ground connecting member extends from said substrate toward said compensating member to resiliently contact said compensating member by being sandwiched between said substrate and said compensating member, and electrically connects said ground with said compensating member in a low impedance state, wherein:

said ground connecting member comprises a base which is connected to said ground and a spacer which is arranged on said base and has elasticity; and

wherein said compensating member is contacted directly by said spacer.

21. (Previously Presented) A ground connection structure comprising:

a substrate, on whose surface a ground is formed;

a ground connecting member which is connected to said ground; and

a compensating member which compensates for an area of said ground and is joined to said substrate such that said ground connecting member is sandwiched between said compensating member and said substrate, and wherein said ground connecting member extends from said substrate toward said compensating member to resiliently contact said compensating member by being sandwiched between said substrate and said compensating member, and electrically connects said ground with said compensating member in a low impedance state, wherein:

said ground connecting member comprises a base section and a spacer;
a plurality of leads project from said base section toward said substrate, and are electrically connected to said ground; and
said spacer is arranged between, and electrically connects, said base section and said compensating member, and has elasticity.

22. (Previously Presented) The ground connection structure according to claim 21, wherein:

said base section comprises a generally planar portion extending generally in parallel to said substrate; and
said plurality of leads project orthogonally from said generally planar portion.

23. (Previously Presented) The ground connection structure according to claim 21, wherein:

said substrate further comprises through holes;
said ground is arranged on a side of said substrate opposite to said compensating member; and
said plurality of leads pass through said through holes to be electrically connected to said ground.

24. (Previously Presented) The ground connection structure according to claim 21,
wherein:

a distal end of at least one of said plurality of leads comprises a protruding section
integral to said at least one of said plurality of leads;

when said plurality of leads pass through said through holes, said protruding section is
arranged on a side of said substrate opposite to said base section, and mechanically fixes said
substrate between said protruding section and said base section, so that no solder is required to
connect said at least one of said plurality of leads to said ground.

25. (Previously Presented) The ground connection structure according to claim 21,
wherein:

said ground is arranged on a side of said internal substrate adjacent to said compensating
member; and

at least one of said plurality of leads comprises a tip part that extends generally
orthogonally from said at least one of said plurality of leads to provide said electrical connection
between said at least one of said plurality of leads and said ground.

26. (Previously Presented) A ground connecting member, which is arranged between a
substrate and a compensating member which compensates for an area of a ground formed on said
substrate, and which electrically connects said ground and said compensating member, and said
ground connecting member comprising:

a base which is connected to said ground; and
a spacer which is arranged on said base and has elasticity, wherein
said spacer is in contact with said compensating member, in a state where said ground
connecting member is sandwiched between said substrate and said compensating member, and
electrically connects said ground and said compensating member in a low impedance state; and
said compensating member is contacted directly by said spacer.

27. (Previously Presented) A ground connection method comprising:
connecting a ground connecting member having elasticity and conductivity, to a ground
formed on a substrate; and
arranging a compensating member for compensating for an area of said ground, on said
substrate such that said ground connecting member extends from said substrate toward said
compensating member to resiliently contact said compensating member and is sandwiched
between the compensating member and said substrate, thereby electrically connecting said
ground and said compensating member via said ground connecting member in a low impedance
state, wherein

said ground connecting member comprises a base which is connected to said ground and
a spacer which is arranged on said base and has elasticity, and
said compensating member is contacted directly by said spacer.

28. (Currently Amended) The ground connection structure according to claim 1, wherein the entire structure of said ground connecting member ~~structure~~ is located on one side of said compensating member.

29. (Currently Amended) The ground connection structure according to claim ~~1~~ 8, wherein the entire structure of said ground connecting member ~~structure~~ is located on one side of said compensating member.

30. (Currently Amended) The ground connection ~~structure~~ method according to claim 13, wherein the entire structure of said ground connecting member ~~structure~~ is located on one side of said compensating member.

31. (New) A ground connection structure comprising:
a substrate, on whose surface a ground is formed;
a ground connecting member which is connected to said ground; and
a compensating member which compensates for an area of said ground and is joined to said substrate such that said ground connecting member is sandwiched between said compensating member and said substrate, wherein:

said ground connecting member comprises a proximal end fixed to said substrate, and an elastic distal end directly resiliently contacting said compensating member; and

said ground connecting member electrically connects said ground with said compensating member in a low impedance state.

32. (New) A ground connection method comprising:

connecting a ground connecting member having elasticity and conductivity, to a ground formed on a substrate; and

arranging a compensating member for compensating for an area of said ground, on said substrate, wherein:

said ground connecting member comprises a proximal end fixed to said substrate, and a elastic distal end directly resiliently contacting said compensating member;

said ground connecting member is sandwiched between the compensating member and said substrate; and

said ground connecting member electrically connects said ground with said compensating member in a low impedance state.

33. (New) The ground connection structure according to claim 2, said spacer is in direct physical contact with said compensating member.

34. (New) The ground connection structure according to claim 13, wherein said ground connecting member comprises:

a base which is connected to said ground; and

a spacer which is arranged on said base and has elasticity.

35. (New) The ground connection structure according to claim 34, said spacer is in direct physical contact with said compensating member.